

# DENON

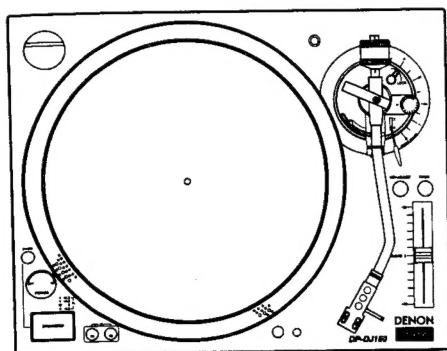
For U.S.A., Canada  
& Europe model

Hi-Fi Component

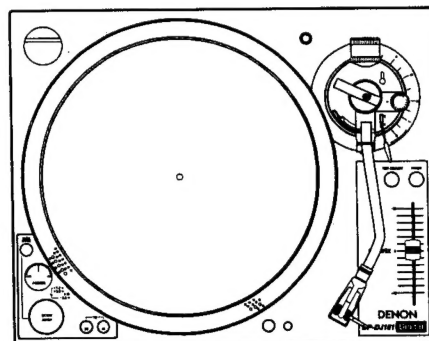
## SERVICE MANUAL

# MODEL DP-DJ150/151

### DIRECT DRIVE MANUAL TURNTABLE SYSTEM



DP-DJ150



DP-DJ151

#### — TABLE OF CONTENTS —

SPECIFICATIONS .....	2
DISASSEMBLY .....	3,4
BLOCK DIAGRAM .....	5
SEMICONDUCTORS .....	6~9
PRINTED WIRING BOARD .....	10~13
NOTE FOR PARTS LIST .....	14
PARTS LIST OF PRINTED WIRING BOARD .....	15~17
EXPLODED VIEW .....	18
PARTS LIST OF EXPLODED VIEW .....	18
PACKING VIEW .....	19
PARTS LIST OF PACKING & ACCESSORIES .....	19
WIRING DIAGRAMS .....	20
SCHEMATIC DIAGRAMS .....	21~23
(1/3) MAIN UNIT/VELOCITY MODULATE UNIT-1/LED UNIT/OUTPUT UNIT-1/ OUTPUT UNIT-2/IC & HEATSINK UNIT-1 .....	21
(2/3) D.D.MOTOR UNIT/IC & HEATSINK UNIT-2 .....	22
(3/3) AC UNIT/VELOCITY MODULATE UNIT-2/OUTPUT UNIT-3/AC JACK UNIT .....	23

● Some illustrations using in this service manual are slightly different from the actual set.

## NIPPON COLUMBIA CO., LTD.

## SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

### LEAKAGE CURRENT CHECK

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

## SPECIFICATIONS

### ■ Turntable

Drive method:	Direct drive
Turning speed:	33 1/3, 45 and 78rpm
Wow/flutter:	0.2% wrms or less
S/N ratio:	50dB or greater
Platter:	Aluminum die-cast, 330mm diameter
Motor:	Brush less DC motor

### ■ Tone arm

Arm type:	Static balance, S-shaped arm pipe
Effective length:	234mm
Overhang:	15mm
Arm height adjustment range:	Approx. 6mm
Stylus pressure adjustment range:	0 to 39.2mN (1scale=0.98mN) [0 to 4.0g (1scale=0.1g)]
Applicable cartridge mass:	6 to 10g

### ■ General

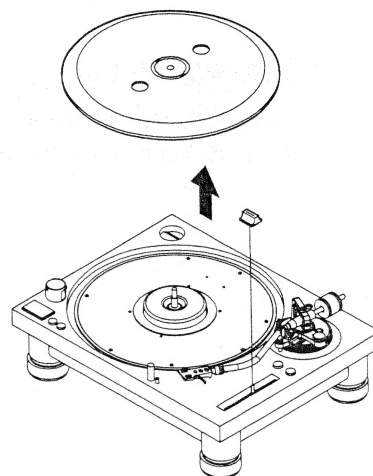
Power supply:	AC115/230V, 50/60Hz
Power consumption:	15W
Dimensions:	448 (W) × 156 (H) × 350 (D) mm 17-1/4 (W) × 6-9/64 (H) × 13-25/32 (D) in.
Mass:	Approx. 12 kg (26 lbs 7 oz)

## DISASSEMBLY

( Follow the procedure below in reverse order when reassembling )

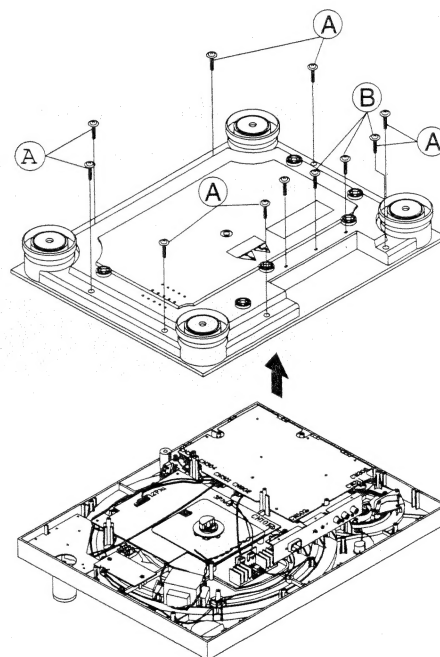
### Platter (step1)

Hooking two holes on the Platter to pull it up with thumb and medius.



### Bottom PCB (step2)

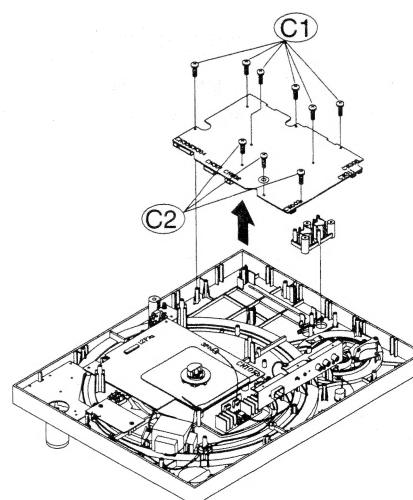
Remove 8 screws (A) and 3 screws (B) mounting the Bottom base as then detach the Bottom base shown in the arrow direction.



### Main PCB (step3)

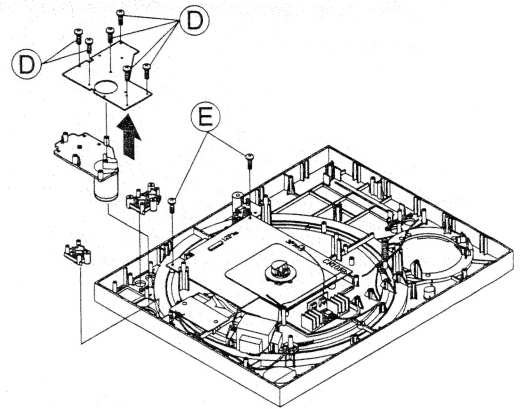
Remove 6 screws (C1) and 3 screws (C2) fixing the Main PCB, then detach the Main PCB as shown in the arrow direction.

**NOTE:** To take out the Pitch knob first before taking out Main PCB. (refer to figure of step1)



### Velocity PCB (step4)

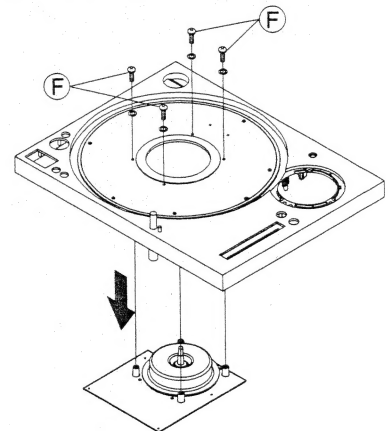
Remove 6 (D) screws fixing the Velocity PCB, then detach the PCB as shown in the arrow direction.



### D.D.motor ass'y (step5)

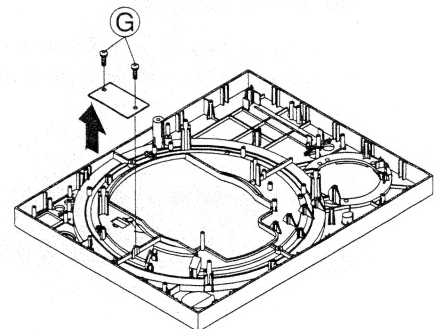
Remove 4 (F) screws 4 washers fixing the D.D.motor ass'y, then detach the D.D.motor ass'y as shown in the arrow direction.

**Note:** The 2 (E) screws should be taken out before taking D.D.motor ass'y out. (refer to figure of step4)



### AC PCB ass'y (step6)

Remove 2 (G) screws fixing the AC PCB ass'y, then detach the AC PCB ass'y as shown in the arrow direction.



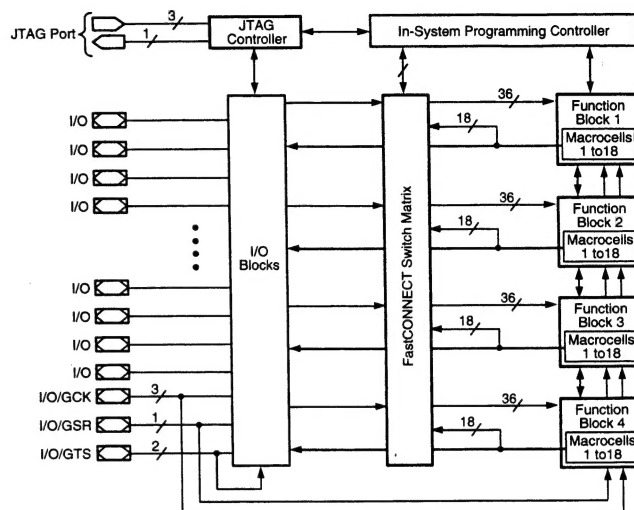
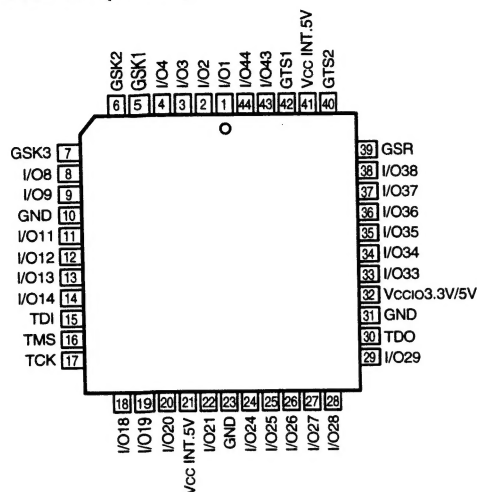
## BLOCK DIAGRAM



# SEMICONDUCTORS

## ● IC's

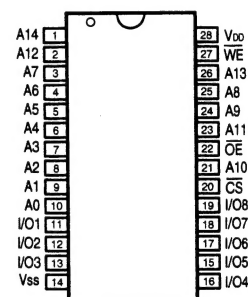
### XC9572(IC304)



### XC9572 Terminal Function

Pin No.	Name	I/O	Function
1	STROBE	O	Strobe output
3	CO0	O	Phase comparator feedback input 0
4	CPI	O	Reference frequency input (TC9242)
5	CPO	I	Reference frequency output (TC9242)
6	CP1	I	From reference frequency output
7	SCK	I	Clock input
8	DS	I	Select enable pin
9	SDA	I	Data input
11	PITCH	I	Pitch on or off determination
12	RPM78	I	78 RPM switch
13	RPM45	I	33/45 RPM switch (TC9242)
18	CLK1	O	SCK buffer output
19	DI1	O	SDA buffer output
22	CO1	O	Phase comparator input1

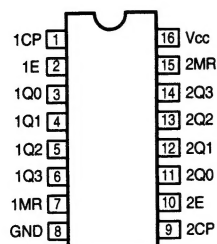
### W24258 (IC502)



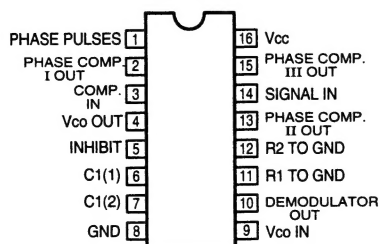
### Terminal Function

Name	Function
A0 ~ A14	Address input
I/O1 ~ I/O8	Data input/output
CS	Chip select input
WE	Write enable input
OE	Output enable input
VDD	Power supply
Vss	GND

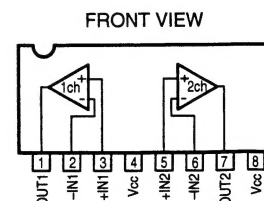
### CD74HC4518(IC106)



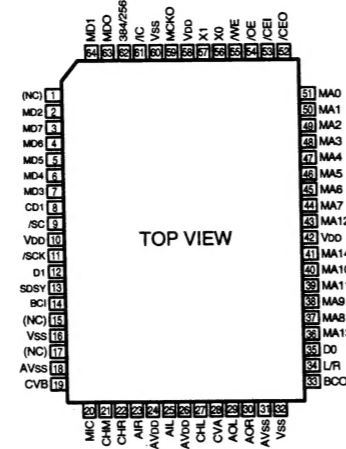
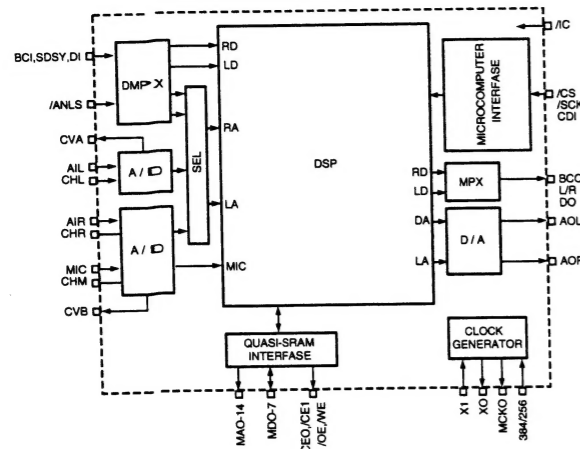
### 74HC4046A(IC302)



### BA10358N(IC103,110)



**YSS205B(IC501)**

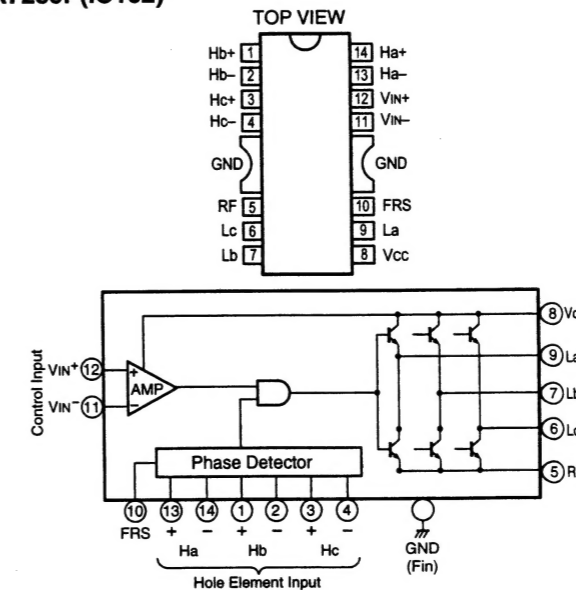


### Terminal Function (YSS205B)

Pin No.	Symbol	I/O	Function
1	(NC)		(Do not make any external connection.)
2	MD2	I/O	Data terminal for external quasi-SRAM interface
3	MD7	I/O	Data terminal for external quasi-SRAM interface
4	MD6	I/O	Data terminal for external quasi-SRAM interface
5	MD5	I/O	Data terminal for external quasi-SRAM interface
6	MD4	I/O	Data terminal for external quasi-SRAM interface
7	MD3	I/O	Data terminal for external quasi-SRAM interface
8	CDI	I	Serial data for microcomputer interface
9	/CS	I	Chip select for microcomputer interface
10	VDD	—	+5V power supply (for digital system)
11	/SCK	I	Serial clock microcomputer interface
12	DI	I+	Serial data for digital voice input
13	SDSY	I+	L/R clock for digital voice input
14	BCI	I+	Bit clock for digital voice input
15	(NC)		(Do not make any external connection.)
16	Vss	—	Ground (for digital system)
17	(NC)		(Do not make any external connection.)
18	AVss	A-	Ground (for A/D, D/a system) Connect to Vss externally
19	CVB	AO	A/D center voltage of Rch, MIC channel
20	MIC	AI	Analog voice MIC channel A/D output
21	CHM	A-	Sample/hold capacitor connecting terminal of MIC input
22	CHR	A-	Sample/hold capacitor connecting terminal of AIR input
23	AIR	AI	Analog voice Rch A/D input
24	AVDd	A-	+5V Power supply (for A/D, D/A system); Connect to VDD externally
25	AIL	AI	Analog voice Lch A/D Input
26	AVDd	A-	+5V Power supply (for A/D, D/A system); Connect to VDD externally
27	CHL	A-	Sample/hold capacitor connecting terminal of AIL input
28	CVA	AO	A/D center voltage of Lch
29	AOL	AO	Analog voice Lch D/A output
30	AOR	AO	Analog voice Rch D/A output
31	AVss	A-	Ground (for A/D, D/a system) Connect to Vss externally
32	Vss	—	Ground (for digital system)
33	BCO	O	Digital voice output bit clock
34	L/R	O	Digital voice output L/R clock
35	DO	O	Digital voice output serial data
36	MA13	O	External quasi-SRAM interface address terminal
37	MA8	O	External quasi-SRAM interface address terminal
38	MA9	O	External quasi-SRAM interface address terminal

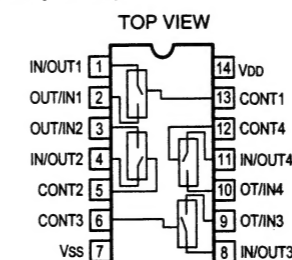
Pin No.	Symbol	I/O	Function
39	MA11	O	External quasi-SRAM interface address terminal
40	MA10	O	External quasi-SRAM interface address terminal
41	MA14	O	External quasi-SRAM interface address terminal
42	VDD	—	+5V Power supply (for digital system)
43	MA12	O	External quasi-SRAM interface address terminal
44	MA7	O	External quasi-SRAM interface address terminal
45	MA6	O	External quasi-SRAM interface address terminal
46	MA5	O	External quasi-SRAM interface address terminal
47	MA4	O	External quasi-SRAM interface address terminal
48	MA3	O	External quasi-SRAM interface address terminal
49	MA2	O	External quasi-SRAM interface address terminal
50	MA1	O	External quasi-SRAM interface address terminal
51	MA0	O	External quasi-SRAM interface address terminal
52	/CE0	O	External quasi-SRAM interface chip select #0
53	/CE1	O	External quasi-SRAM interface chip select #1 (effective when 2 of them are connected.)
54	/OE	O	External quasi-SRAM interface OE terminal
55	/WE	O	External quasi-SRAM interface WE terminal
56	XO	O	X'tal oscillator connecting terminal
57	XI	I	X'tal oscillator or external clock connecting terminal
58	VDD	—	+5V Power supply (for digital system)
59	MCKO	O	Master clock (XI clock) output
60	VSS	—	Ground (for digital system)
61	/IC	I	Initial clear terminal
62	384/256	I+	Master clock rate shifting ("H"=384fs, "L"=256fs)
63	MD0	I/O	External quasi-SRAM interface data terminal
64	MD1	I/O	External quasi-SRAM interface data terminal

**TA7259P(IC102)**

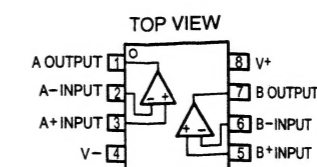


Pin No.	Symbol	Function
1	Hb+	b-phase hole amp positive input terminal
2	Hb-	b-phase hole amp negative input terminal
3	Hc+	c-phase hole amp positive input terminal
4	Hc-	c-phase hole amp negative input terminal
5	RF	Output block ground terminal
6	Lc	c-phase drive output terminal
7	Lb	b-phase drive output terminal
8	Vcc	Power supply terminal
9	La	a-phase drive output terminal
10	FRS	Forward/reverse switching terminal
11	VIN-	Control amp negative input terminal
12	VIN+	Control amp positive input terminal
13	Ha+	a-phase hole amp positive input terminal
14	Ha-	a-phase hole amp negative input terminal
Fin	GND	Ground terminal

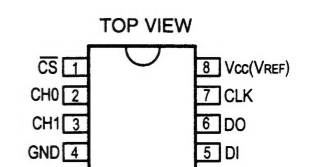
**TC4066BP(IC305)**



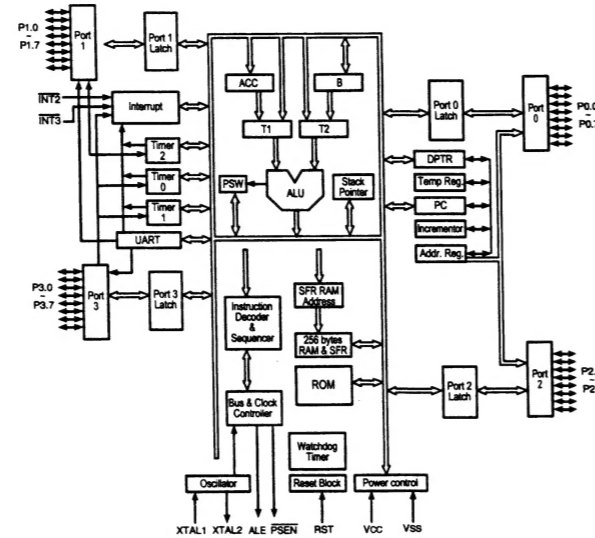
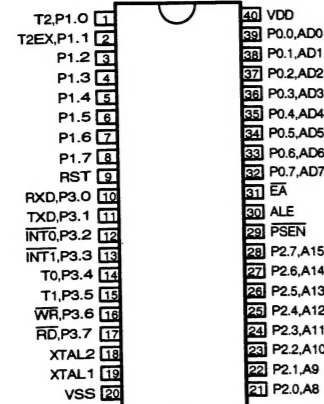
**NJM4558D(IC505,506)**



**ADC0832(IC301)**



## W78E52(IC303)

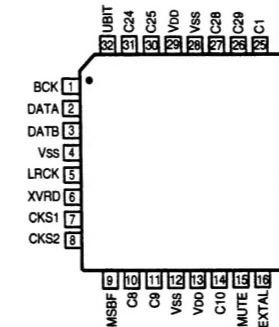
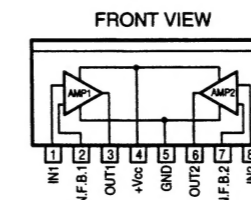


## W78E52 Terminal Function

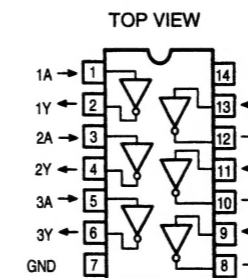
Pin No.	Symbol	I/O	Function
1	P1.0	I	PLAY/STOP key
2	P1.1	I	33 key
3	P1.2	I	45 key
4	P1.3	I	BRAKE key
5	P1.4	—	NC
6	P1.5	I	PITCH OFF key
7	P1.6	I	PITCH LOW (GND)
8	P1.7	I	PITCH ON key
9	RST	—	Reset: A high on this pin for two machine cycles while the oscillator is running resets the device
10	P3.0	—	NC
11	P3.1	O	PITCH ON LED
12	P3.2	O	PITCH OFF LED
13	P3.3	O	Drive1: Drive assist
14	P3.4	I	FG: FG pulse input
15	P3.5	I	Remote input
16	P3.6	I	LD: Lock detecting terminal (TC9242)
17	P3.7	I	AFC input (TC9242)
18	XTAL2	—	Crystal2: This is the crystal oscillator output. It is the inversion of XTAL1
19	XTAL1	—	Crystal1: This is the crystal oscillator input. This pin may be driven by an external clock
20	Vss	—	Ground: Ground potential
21	P2.0	I	ROT: Determination of forward or reverse rotate (L: Reverse rotate, H: Forward rotate)
22	P2.1	O	FRS: Selection of forward or reverse rotate (L: Reverse rotate, H: Forward rotate)
23	P2.2	O	P/S: Motor play/stop signal (TC9242)
24	P2.3	O	33/45: Speed switching (L: 33 1/3RPM, H=45RPM (78RPM=L) or 78RPM (78RPM=H))
25	P2.4	O	Drive 2: Drive assist
26	P2.5	O	78RPM: Speed switching (L: 33 1/3RPM (33/45=L) or 45RPM (33/45=H); H=78RPM (33/45=H))
27	P2.6	I	DO: Data output in
28	P2.7	O	DI: Data input out
29	PSEN	—	Program store enable: PSEN enables the external ROM data onto the Port 0 address/data bus during fetch and MOVc operations. When internal ROM access is performed, no PSEN strobe signal outputs from this pin.
30	ALE	—	Address latch enable: ALE is used to enable the address latch that separates the address from the data on Port0.
31	$\overline{EA}$	—	External access enable: This pin forces the processor to execute out of external ROM. It should be kept high to access internal ROM. The ROM address and data will not be presented on the bus if $\overline{EA}$ pin is high and the program counter is within on-chip ROM area.

Pin No.	Symbol	I/O	Function
32	P0.7	O	CLK: Clock output
33	P0.6	—	NC
34	P0.5	O	CS: ADC0832 Chip select
35	P0.4	O	DS: XC9572 Chip select
36	P0.3	O	33 LED
37	P0.2	O	45 LED
38	P0.1	O	Brake LED
39	P0.0	O	PB: H=Pitch ON, L=Pitch OFF (XC9572)
40	VDD	—	Power supply: Supply voltage for operation.

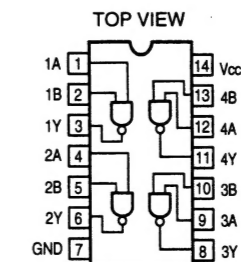
## CXD2917Q(IC507)

 $\mu$ PC1228HA(IC503)

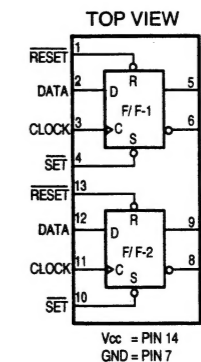
## TC74HCU04AF(IC508)



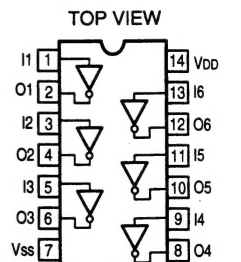
## 74HC00AP(IC107)



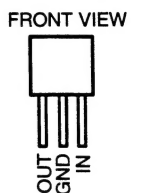
## 74HC74AP(IC104)



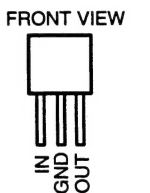
## TC4069UBP(IC105)



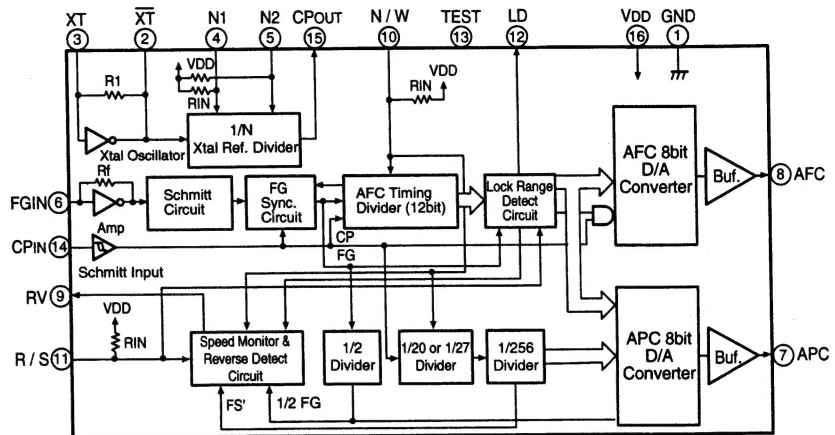
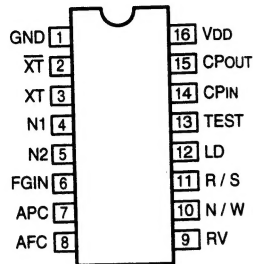
## NJM78L05FA(IC109)



## NJM7805FA(IC901)



## TC9242P(IC101)



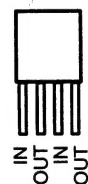
### Terminal Function

Pin No.	Symbol	Function
1	GND	Power supply (5V $\pm$ 0.5V) terminal
2	XT	X'tal oscillator connection terminal
3	XT	X'tal oscillator connection terminal
4	N1	Ref. frequency divide (1/3, 1/4, 1/5) switching terminal
5	N2	Ref. frequency divide (1/3, 1/4, 1/5) switching terminal
6	FGIN	Motor revolution pulse input terminal
7	APC	Motor phase control system output terminal, 8bit P-V converter
8	AFC	Motor speed control system output terminal, 8bit F-V converter
9	RV	Motor reverse signal output terminal
10	N/W	Lock range switching terminal, H or open: 1/20, L: 1/27
11	R/S	Motor run/stop signal input terminal, H or open: Stop, L: Run
12	LD	Motor revolution lock monitor terminal, H: Locked, L: Out of lock
13	TEST	Output for internal test, leave it open normally
14	CPIN	Connects with CPout normally, inputs from external osc when fine adj.
15	CPOUT	Output of X'tal ref. divider, connects with CPIN normally
16	VDD	Power supply (5V $\pm$ 0.5V) terminal

### ● Hole Element

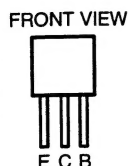
HW300B(HE101~103)

FRONT VIEW



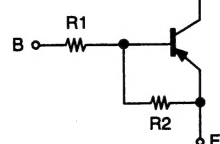
### ● TRANSISTORS

2SC1740R  
2SC1815  
2SD1468  
DTA124ES  
DTA124TS  
DTC124ES  
DTC124TS



DTA124ES  
DTA124TS

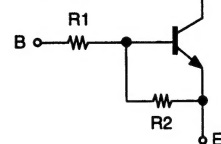
PNP Type



	R1	R2
DTA124ES	22kohm/ $\Omega$	22kohm/ $\Omega$
DTA124TS	22kohm/ $\Omega$	—

DTC124ES  
DTC124TS

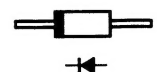
NPN Type



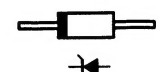
	R1	R2
DTC124ES	22kohm/ $\Omega$	22kohm/ $\Omega$
DTC124TS	22kohm/ $\Omega$	—

### ● DIODES

1N4002  
1SS132

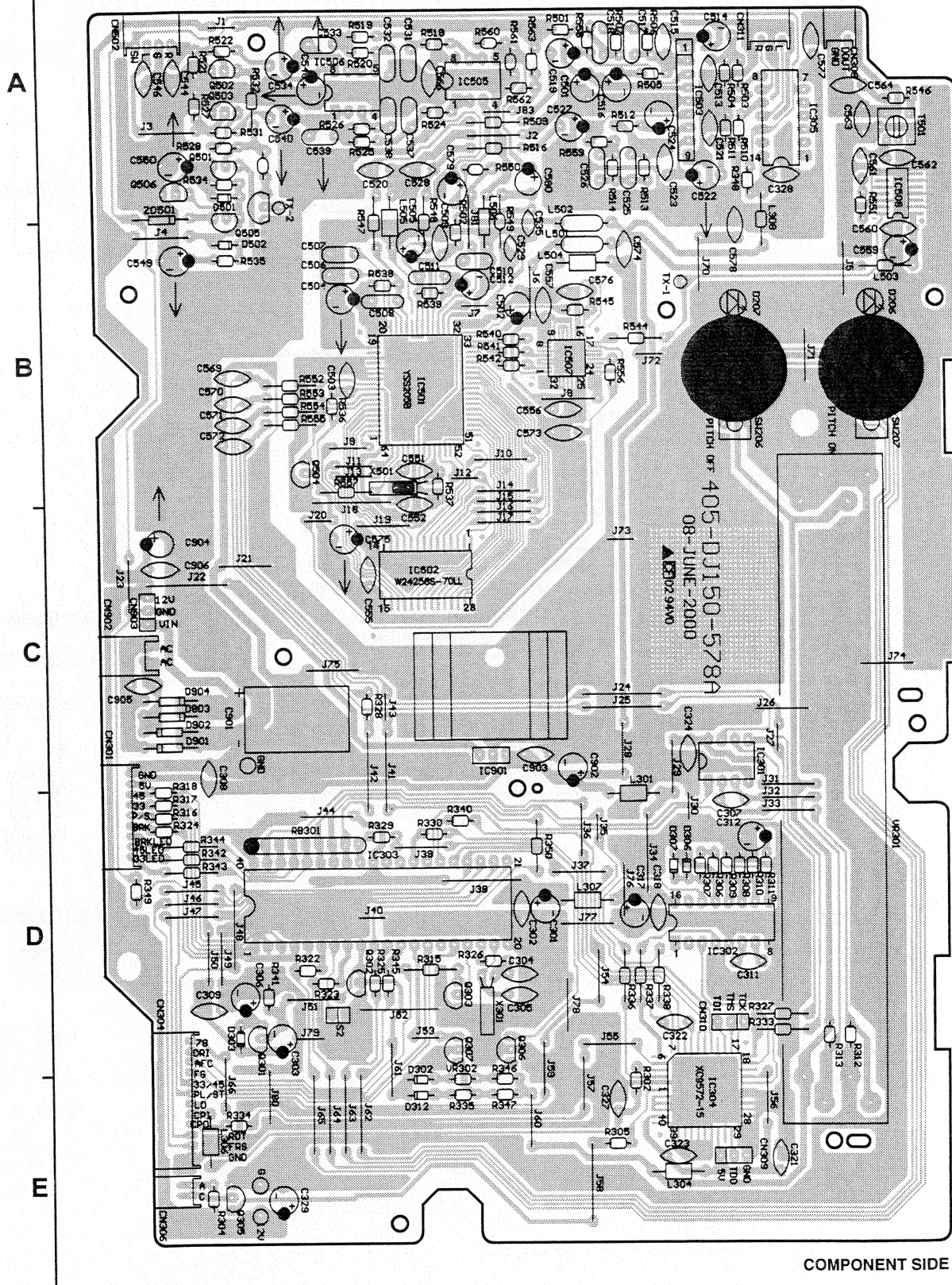


MTZ8.2B



## PRINTED WIRING BOARDS

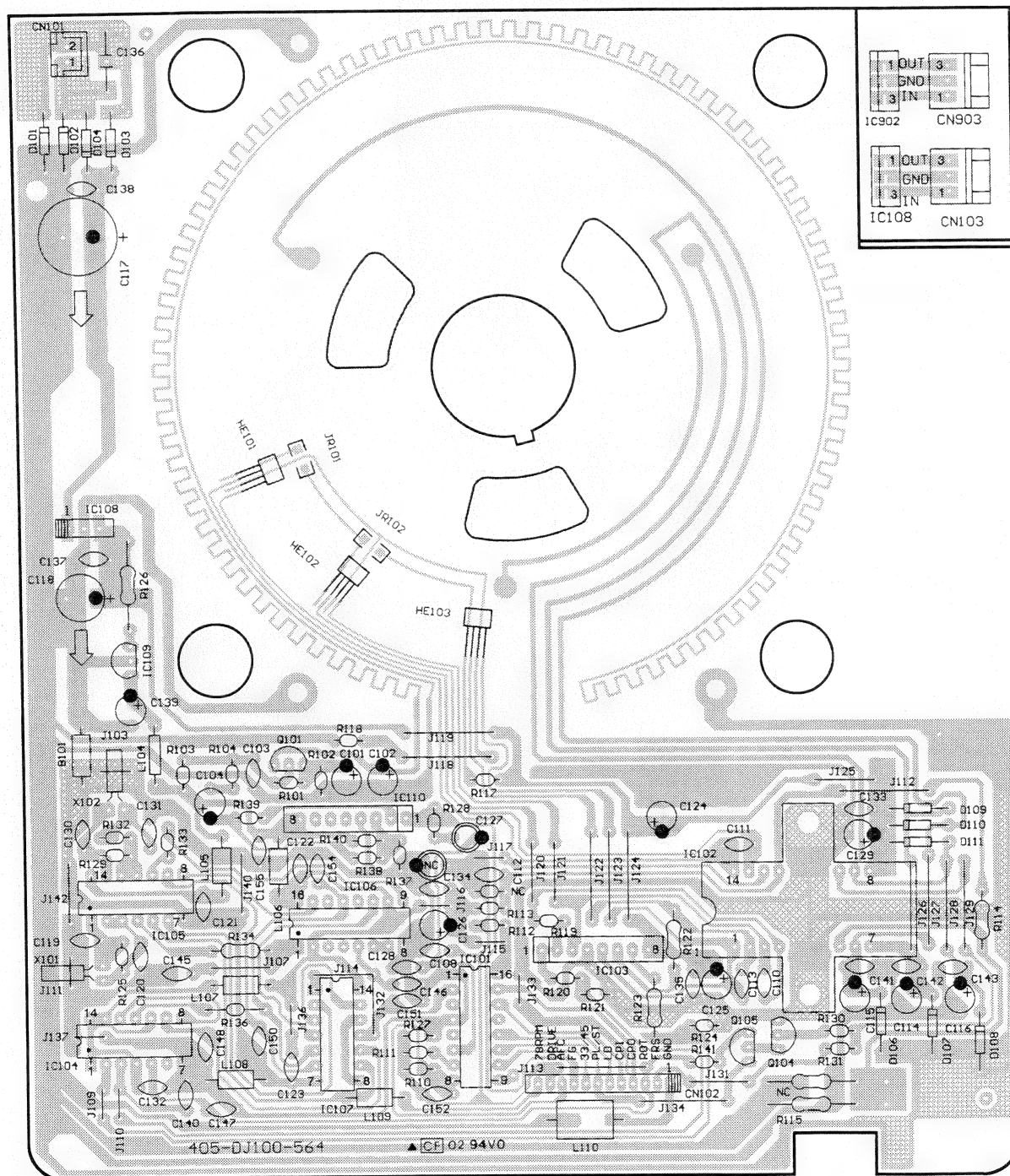
## MAIN P.W.B. UNIT ASS'Y



**COMPONENT SIDE**

D.D. MOTOR P.W.B.

IC & HEAT SINK P.W.B.



### COMPONENT SIDE



4

### COMPONENT SIDE

### COMPONENT SIDE

### COMPONENT SIDE

E

## NOTE FOR PARTS LIST

- Part indicated with the mark "⊕" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including Carbon Film  $\pm 5\%$ , 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

### WARNING:

Parts marked with this symbol  have critical characteristics.  
Use ONLY replacement parts recommended by the manufacturer.

### ● Resistors

Ex.: RN 14K 2E 182 G FR  
Type Shape Power Resist- Allowable Others  
and per- ance error

RD : Carbon	2B : 1/8W	F : $\pm 1\%$	P : Pulse-resistant type
RC : Composition	2E : 1/4W	G : $\pm 2\%$	NL : Low noise type
RS : Metal oxide film	2H : 1/2W	J : $\pm 5\%$	NB : Non-burning type
RW : Winding	3A : 1W	K : $\pm 10\%$	FR : Fuse-resistor
RN : Metal film	3D : 2W	M : $\pm 20\%$	F : Lead wire forming
RK : Metal mixture	3F : 3W		
	3H : 5W		

#### \* Resistance

1 8 2  $\Rightarrow$  1800 ohm = 1.8 kohm  
Indicates number of zeros after effective number.  
2-digit effective number.

• Units: ohm

1 R 2  $\Rightarrow$  1.2 ohm  
1-digit effective number.  
2-digit effective number, decimal point indicated by R.

• Units: ohm

### ● Capacitors

Ex.: CE 04W 1H 2R2 M BP  
Type Shape Dielectric Capacity Allowable Others  
and per- strength error

CE : Aluminum foil electrolytic	0J : 6.3V	F : $\pm 1\%$	HS : High stability type
CA : Aluminum solid electrolytic	1A : 10V	G : $\pm 2\%$	BP : Non-polar type
CS : Tantalum electrolytic	1C : 16V	J : $\pm 5\%$	HR : Ripple-resistant type
CO : Film	1E : 25V	K : $\pm 10\%$	DL : For charge and discharge
CK : Ceramic	1V : 35V	M : $\pm 20\%$	HF : For assuring high frequency
CC : Ceramic	1H : 50V	Z : $+80\%$	U : UL part
CP : Oil	2A : 100V	-20%	C : CSA part
CM : Mica	2B : 125V	P : $+100\%$	W : UL-CSA type
CF : Metallized	2C : 160V	-0%	F : Lead wire forming
CH : Metallized	2D : 200V	C : $\pm 0.25\text{pF}$	
	2E : 250V	D : $\pm 0.5\text{pF}$	
	2H : 500V	= : Others	
	2J : 830V		

#### \* Capacity (electrolyte only)

2 2 2  $\Rightarrow$  2200 $\mu\text{F}$   
Indicates number of zeros after effective number.  
2-digit effective number.

• Units:  $\mu\text{F}$ .

2 R 2  $\Rightarrow$  2.2 $\mu\text{F}$   
1-digit effective number.  
2-digit effective number, decimal point indicated by R.

• Units:  $\mu\text{F}$ .

#### \* Capacity (except electrolyte)

2 2 2  $\Rightarrow$  2200pF=0.0022 $\mu\text{F}$   
(More than 2) — Indicates number of zeros after effective number.  
2-digit effective number.

• Units:  $\mu\text{F}$ .

2 2 1  $\Rightarrow$  220pF  
(0 or 1) — Indicates number of zeros after effective number.  
2-digit effective number.

• Units: pF.

• When the dielectric strength is indicated in AC, "AC" is included after the dielectric strength value.

# PARTS LIST OF P.W.B. UNIT MAIN P.W.B. UNIT ASS'Y

Note : The symbols in the column "Remarks" indicate the following destinations.  
E2 : Europe model, E3 : U.S.A. & Canada model, EK : U.K. model

Ref. No.	Part No.	Part Name	Remarks	Ref. No.	Part No.	Part Name	Remarks
<b>SEMICONDUCTORS GROUP</b>				C311		Ceramic 1000pF/50V	
IC301	958 0040 109	IC ADC0832		C312		Electrolytic 10μF/25V	
IC302	958 0040 206	IC 74HC4046A		C317		Electrolytic 100μF/10V	
IC303	958 0040 905	IC W78E52DIP		C318		Ceramic 0.1μF/50V	
IC304	958 0041 001	IC XC9572-15-PC44		C321		Ceramic 0.1μF/50V	
IC305	262 0395 009	IC TC4066BP		C322		Ceramic 15pF/50V	
IC501	958 0048 606	IC YSS205B		C323		Ceramic 0.1μF/25V	
IC502	958 0048 703	IC W24258S-70LL		C324		Ceramic 0.1μF/50V	
IC503	958 0049 702	IC TA7325P		C327		Ceramic 47pF/50V	
IC505,506	263 0081 002	IC NJM4558D		C328		Ceramic 0.1μF/50V	
IC507	958 0048 907	IC CXD2917Q		C329		Electrolytic 100μF/16V	
IC508	958 0048 800	IC TC74HCU04AFN		C501		Electrolytic 100μF/16V	
IC901	958 0040 303	IC NJM7805FA		C502		Electrolytic 100μF/10V	
Q301	269 0063 002	Transistor DTA124ES		C503		Ceramic 0.1μF/50V	
Q302	269 0075 906	Transistor DTC124TS		C504		Electrolytic 100μF/10V	
Q303	273 0303 907	Transistor 2SC1740R (R)		C505		Electrolytic 220μF/6.3V	
Q305	273 0198 921	Transistor 2SC1815(GR)		C506-508		Polyester 0.0033μF/100V	
Q306,307	269 0063 002	Transistor DTA124ES		C509		Ceramic 0.1μF/50V	
Q501	269 0075 906	Transistor DTC124TS		C510,511		Polyester 0.0033μF/100V	
Q502,503	274 0131 004	Transistor 2SD1468S(R)		C512		Electrolytic 100μF/10V	
Q504	269 0075 906	Transistor DTC124TS		C513		Ceramic 100pF/50V	
Q505,506	269 0063 002	Transistor DTA124ES		C514		Electrolytic 4.7μF/50V	
D206	958 0041 807	LED (GREEN)	for (PITCH ON)	C515		Ceramic 100pF/50V	
D207	958 0041 700	LED (RED)	for (PITCH OFF)	C516		Electrolytic 100μF/16V	
D302,303	958 0042 806	Diode 1SS132		C517		Myler 0.01μF/50V	
D306,307	958 0042 806	Diode 1SS132		C518		Myler 0.0027μF/50V	
D312	958 0042 806	Diode 1SS132		C519		Electrolytic 4.7μF/50V	
D501,502	958 0042 806	Diode 1SS132		C520		Ceramic 1000pF/50V	
D901-904	958 0018 607	Diode 1N4002		C521		Ceramic 100pF/50V	
ZD501	958 0049 003	Zener diode MTZ8.2B		C522		Electrolytic 4.7μF/50V	
<b>RESISTORS GROUP</b>				C523		Ceramic 100pF/50V	
RB301	958 0041 904	Resistor networks 10 kohmX8		C524		Electrolytic 22μF/16V	
VR302	958 0042 000	Vsriable resistor 10 kohm		C525		Myler 0.01μF/50V	
<b>CAPACITORS GROUP</b>				C526		Myler 0.0027μF/50V	
C301		Electrolytic 100μF/10V		C527		Electrolytic 4.7μF/50V	
C302		Ceramic 0.1μF/50V		C528		Ceramic 1000pF/50V	
C303		Electrolytic 10μF/50V		C529		Ceramic 33pF/50V	
C304,305		Ceramic 33pF/50V		C529		Ceramic 220pF/50V	
C306		Electrolytic 1μF/50V		C531		Myler 2200pF/50V	
C307-309		Ceramic 0.1μF/50V		C532		Myler 0.0015μF/50V	
				C533		Polyester 0.022μF/50V	
				C534		Electrolytic 10μF/25V	
				C535		Ceramic 33pF/50V	
				C535		Ceramic 220pF/50V	
				C537		Myler 2200pF/50V	
				C538		Myler 0.0015μF/50V	
				C539		Polyester 0.022μF/50V	
				C540		Electrolytic 10μF/25V	
				C544		Ceramic 470pF/50V	
				C546		Ceramic 470pF/50V	
				C548,549		Electrolytic 100μF/16V	

Ref. No.	Part No.	Part Name	Remarks	Q'ty
C550		Electrolytic 10 $\mu$ F/25V		
C551,552		Ceramic 20pF/50V		
C553		Chip Ceramic 1000pF/50V		
C555		Ceramic 0.1 $\mu$ F/25V		
C556,557		Ceramic 0.1 $\mu$ F/50V		
C559		Electrolytic 100 $\mu$ F/16V		
C560,561		Ceramic 0.1 $\mu$ F/50V		
C562		Ceramic 68pF/50V		
C563		Ceramic 0.1 $\mu$ F/50V		
C564		Ceramic 47pF/50V		
C566		Ceramic 0.1 $\mu$ F/50V		
C569-573		Ceramic 1000pF/50V		
C574		Ceramic 0.1 $\mu$ F/50V		
C575		Electrolytic 100 $\mu$ F/10V		
C576		Ceramic 15pF/50V		
C577,578		Ceramic 0.1 $\mu$ F/50V		
C579,580		Electrolytic 1 $\mu$ F/50V		
C901		Electrolytic 1000 $\mu$ F/25V		
C902		Electrolytic 100 $\mu$ F/10V		
C903		Ceramic 0.1 $\mu$ F/50V		
C904		Electrolytic 100 $\mu$ F/16V		
C905,906		Ceramic 0.1 $\mu$ F/50V		
OTHER PARTS GROUP				Q'ty
CN301	958 0041 205	9P socket		1
CN304	958 0041 302	12P socket		1
CN308	958 0041 409	2P socket		1
CN309,310	958 0042 204	3P pin		2
CN311	958 0050 801	3P socket		1
CN502	958 0050 607	4P socket		1
CN606	958 0041 409	2P socket		1
CN902	958 0041 603	2P connector		1
CN903	958 0041 108	2P connector wire		1
GND		Lead wire		1
L301	958 0016 900	Bead core		1
L304	958 0016 900	Bead core		1
L306,307	958 0016 900	Bead core		2
L308	958 0017 006	Inductor		1
L501-503	958 0017 006	Inductor		3
L504-506	958 0016 900	Bead core		3
S2	958 0042 107	2P pin		1
SW206,207	958 0018 306	Tact switch		2

Ref. No.	Part No.	Part Name	Remarks	Q'ty
T501	958 0020 705	Coil		1
X301	958 0015 707	Crystal 12MHz		1
X501	958 0015 600	Crystal 16.9344MHz		1
	958 0050 704	2P socket	for S2	1
	958 0013 806	40P IC jack	for IC303	1
	958 0042 301	Heat sink		1
	958 0042 408	LED holder	for D206,207	2
	958 0042 505	Nut		1
	958 0042 602	Screw 3X9		1
	958 0042 709	VR cushion		1

## D.D. MOTOR P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks	
SEMICONDUCTORS GROUP				
IC101	958 0043 106	IC TC9242P	to CN103	
IC102	958 0043 300	IC TA7259P		
IC103	958 0043 708	IC BA10358N		
IC104	958 0043 407	IC 74HC74AP		
IC105	958 0043 009	IC TC4069UBP		
IC106	958 0043 203	IC CD74HC4518		
IC107	958 0043 504	IC 74HC00AP		
IC108	958 0044 406	3P-3P connector wire Ass'y		
IC109	958 0016 308	IC NJM78L05A		
IC110	958 0043 708	IC BA10358N		
HE101~103	958 0043 601	IC HW-300BE		
Q101	273 0303 907	Transistor 2SC1740S(R)		
Q104	269 0075 906	Transistor DTC124TS		
Q105	269 0092 905	Transistor DTA124TS		
D101~104	958 0018 607	Diode 1N4002		
D106~111	958 0018 607	Diode 1N4002		
RESISTORS GROUP				
R115	958 0046 909	Carbon film 3.3 ohm 2W		
R126	958 0046 802	Carbon film 200 ohm 1W		
CAPACITORS GROUP				
C101	958 0050 102	Electrolytic 4.7μF/50V		
C102		Electrolytic 10μF/25V		
C103		Ceramic 0.047μF/50V		
C104		Electrolytic 1μF/50V		
C108		Ceramic 150pF/50V		
C110,111		Ceramic 0.01μF/50V		
C112		Ceramic 0.047μF/50V		
C113		Ceramic 0.01μF/50V		
C114~116		Electrolytic 100μF/25V		
C117		Electrolytic 1000μF/50V		
C118		254 4256 088		Electrolytic 1000μF/25V
C119,120				Ceramic 30pF/50V
C121~123				Ceramic 0.1μF/50V
C124,125				Electrolytic 100μF/25V
C126				Electrolytic 100μF/10V
C127		254 3056 014		Electrolytic 1μF/50V BP
C128		Ceramic 0.015μF/50V		
C129		Electrolytic 100μF/25V		
C130,131		Ceramic 18pF/50V		
C132~135		Ceramic 0.1μF/25V		
C137,138		Ceramic 0.1μF/50V		
C139		Electrolytic 100μF/10V		
C140~143		Ceramic 0.1μF/50V		
C145		Ceramic 56pF/50V		
C146		Ceramic 47pF/50V		

Ref. No.	Part No.	Part Name	Remarks	
C147,148		Ceramic 68pF/50V		
C150		Ceramic 22pF/50V		
C151		Ceramic 68pF/50V		
C152		Ceramic 0.1μF/50V		
C154		Ceramic 33pF/50V		
C155,156		Ceramic 0.1μF/50V		
OTHER PARTS GROUP				Q'ty
B107	958 0016 900	Bead core		1
CN101	958 0044 503	2P connector		1
CN102	958 0044 309	12P connector wire		1
L104	958 0017 006	Inductor 10μH		1
L105~108	958 0016 900	Bead core		4
L109	958 0014 902	Core		1
X101	958 0044 008	Crystal 5.5296MHz		1
X102	958 0043 902	Crystal units 11.981350MHz		1
		Ground wire		1
	958 0043 805	Heat sink	for IC102	1
	958 0044 707	Screw 3×8 (B)		2

Ref. No.	Part No.	Part Name	Remarks	
C147,148		Ceramic 68pF/50V		
C150		Ceramic 22pF/50V		
C151		Ceramic 68pF/50V		
C152		Ceramic 0.1μF/50V		
C154		Ceramic 33pF/50V		
C155,156		Ceramic 0.1μF/50V		
OTHER PARTS GROUP				Q'ty
B107	958 0016 900	Bead core	for IC102	1
CN101	958 0044 503	2P connector		1
CN102	958 0044 309	12P connector wire		1
L104	958 0017 006	Inductor 10μH		1
L105~108	958 0016 900	Bead core		4
L109	958 0014 902	Core		1
X101	958 0044 008	Crystal 5.5296MHz		1
X102	958 0043 902	Crystal units 11.981350MHz		1
		Ground wire		1
	958 0043 805	Heat sink		1
	958 0044 707	Screw 3×8 (B)		2

## IC &amp; HEATSINK P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC108	263 1044 006	IC NJM7818FA	
IC902	263 0516 001	IC NJM7812FA	
OTHER PARTS GROUP			Q'ty
CN103	958 0044 600	3P socket	1
CN903	958 0044 600	3P socket	1
		Heat sink	1
		Screw	2

## VELOCITY MODULATE P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks
<b>SEMICONDUCTORS GROUP</b>			
D201,202	958 0045 104	LED (YELLOW)	for (45), (33)
D204	958 0045 104	LED (YELLOW)	for (BRAKE)
<b>OTHER PARTS GROUP</b>			
CN201	958 0045 007	9P connector wire	1
Δ SW01	958 0044 804	Micro switch	POWER 1
SW201~204	958 0044 901	Tact switch	4

## AC P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks
<b>RESISTORS GROUP</b>			
R02		Carbon film 1 Mohm 1/2W	
<b>CAPACITORS GROUP</b>			
Δ C01	958 0010 003	Ceramic 4700pF/400V	
Δ C02	958 0045 308	Metalized 0.1μF/250V	
<b>OTHER PARTS GROUP</b>			
W1A	—	Lead wire (red)	1
W2A	—	Lead wire (orange)	1
	—	Lead wire (red)	to AC socket Vcc 1
	—	Lead wire	to AC socket GND 1
	—	Cable tie	2
	—	Lead wire (yellow)	1

## AC JACK P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks	Q'ty
<b>OTHER PARTS GROUP</b>				
Δ	958 0045 201	AC jack		1
	958 0045 405	Fuse clips		2
Δ	958 0046 404	Fuse 1A250V	for E3	1
Δ	958 0045 502	Fuse 1A250V	for E2/EK	1
	958 0045 609	Fuse cover		1

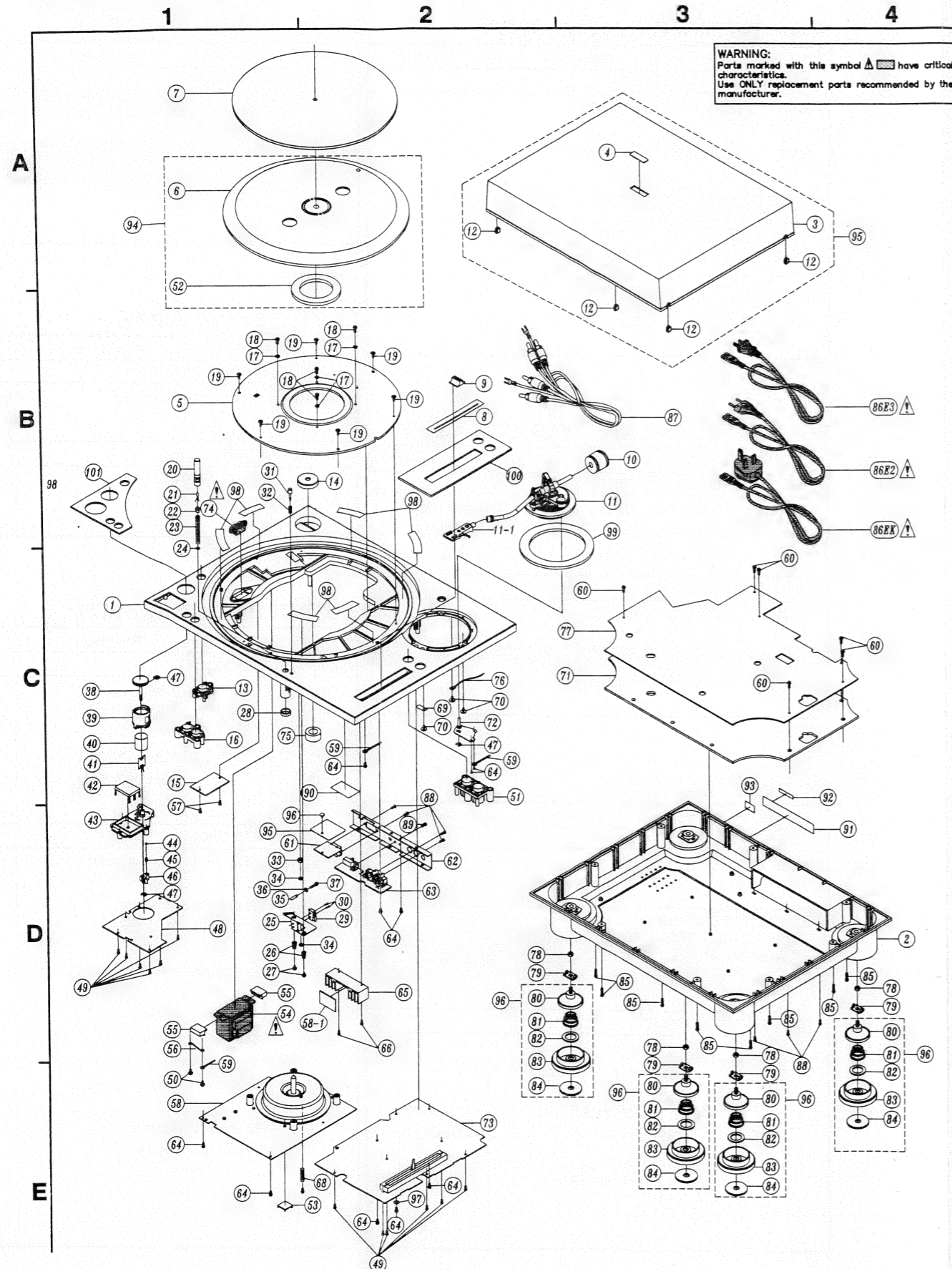
## LED P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks
<b>SEMICONDUCTORS GROUP</b>			
D308~311	958 0045 706	LED (RED)	for (1)
<b>OTHER PARTS GROUP</b>			
	958 0042 408	LED holder	for D308~311 4

## OUTPUT P.W.B. UNIT ASS'Y

CONTRACT INFORMATION REPORT			
Ref. No.	Part No.	Part Name	Remarks
CAPACITORS GROUP			
C3		Ceramic 0.1μF/50V	
C5		Ceramic 0.1μF/50V	
C545		Ceramic 470pF/50V	
C547		Ceramic 470pF/50V	
OTHER PARTS GROUP			
CN308A	958 0045 900	2P connector wire	1
JK501	958 0046 006	2P pin jack	1
JK502	958 0053 400	1P pin jack	1
SW501	958 0049 304	Slide switch	1
W308	958 0049 508	2P Wire	1
W311	958 0049 605	3P Wire	1
W502	958 0049 401	4P connector wire	1
	958 0045 803	Bracket (L)	2
	958 0046 103	Screw 3×5	2

## EXPLODED VIEW

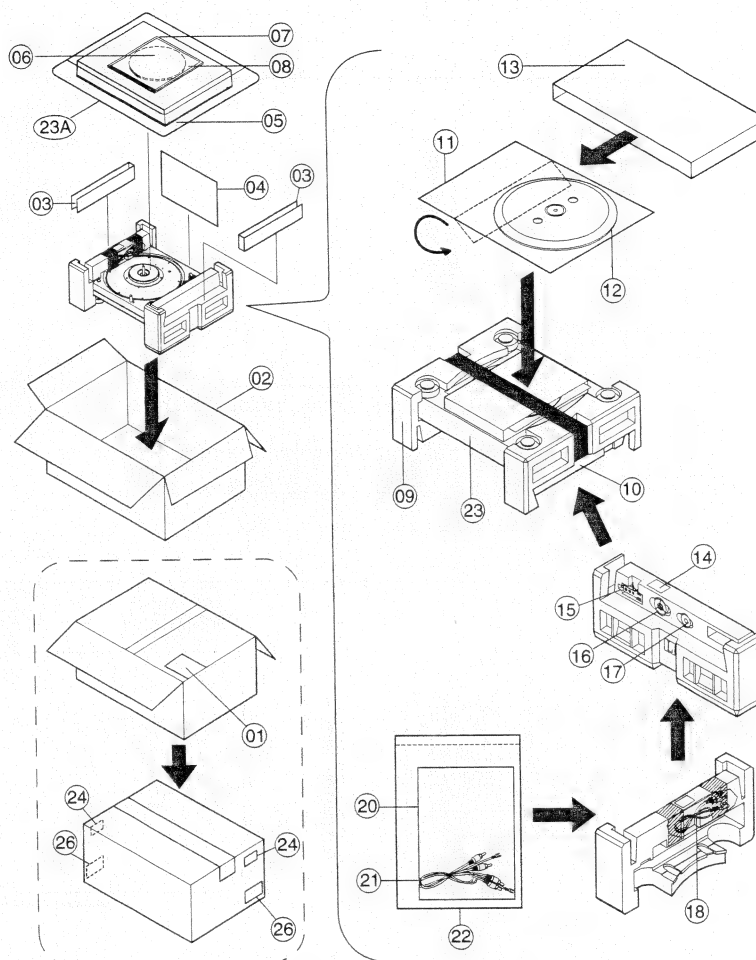


## PARTS LIST OF EXPLODED VIEW

Note: The symbols in the column "Remarks" indicate the following destinations.  
E2: Europe model, E3: U.S.A. & Canada model, EK: U.K. model

Ref. No.	Part No.	Part Name	Remarks	Q'ty	Ref. No.	Part No.	Part Name	Remarks	Q'ty
15	958 0031 419	AC P.W.B. Ass'y		1	54	958 0047 403	Power trans.	T1	1
41	958 0034 005	LED P.W.B. Ass'y		1	55	958 0035 402	Cushion rubber	for Power trans.	2
48	958 0047 306	Velocity modulate P.W.B. Ass'y		1	56	958 0035 509	Transformer leaf spring		1
58	958 0030 902	D.D. motor P.W.B. Ass'y		1	59	958 0035 800	Clamper		2
61	958 0036 029	AC jack P.W.B. Ass'y	for E3	1	62	958 0036 100	Output fixed panel		1
61	958 0036 032	AC jack P.W.B. Ass'y	for E2,EK	1	67	958 0036 605	Ground wire		1
63	958 0049 207	Output P.W.B. Ass'y		1	68	958 0047 607	Shielding spring		1
65	958 0036 401	IC & heat sink P.W.B. Ass'y		1	69	958 0036 809	Cushion sheet		1
73	958 0047 704	Main P.W.B. Ass'y		1	71	958 0037 002	Bottom plate (t=4)		1
					72	958 0037 109	Up/down fixed Ass'y		1
1	958 0047 005	Chassis	for DP-DJ150	1	74	958 0037 303	Slide switch		1
1	958 0052 906	Chassis	for DP-DJ151	1	75	958 0037 400	EMI core		1
2	958 0030 106	Bottom cover		1	76	958 0037 507	Ground wire (L=80)		1
3	958 0030 203	Dust cover	Ref. No. 3,4 Ass'y	1	77	958 0037 604	Bottom plate (t=2)		1
4		Dust cover plate		1	79	958 0037 808	Foot fixed plate		4
5	958 0030 313	Motor fixed plate	for DP-DJ150	1	80	958 0037 905	Rubber foot (black)	Ref. No. 80,81, 82,83,84 Ass'y	4
5	958 0053 002	Motor fixed plate	for DP-DJ151	1	81		Foot spring		4
6	958 0030 407	Aluminium platter	Ref. No. 6,93 Ass'y	1	82		Cushion for foot spring (black)		4
7	958 0030 517	Slip mat		1	83		Plastic foot		4
8	958 0030 601	Decorations plate		1	84		Rubber pad		4
9	958 0030 708	Speed push button	for DP-DJ150	1	86E3	958 0038 111	AC cord	for E3	1
9	958 0052 605	Speed push button	for DP-DJ151	1	86E2	958 0038 124	AC cord	for E2	1
10	958 0030 805	Counter weight		1	86EK	958 0038 137	AC cord	for EK	1
11	958 0030 902	Tone arm Ass'y		1					
11-1	958 0031 008	Headshell Ass'y	for DP-DJ150	1	87	958 0047 801	2P pin plug cord		1
11-1	958 0053 109	Headshell Ass'y	for DP-DJ151	1	90	958 0038 506	Fuse label		1
12	958 0031 105	Rubber		4	91	958 0047 908	Rating label	for DP-DJ150 E3	1
13	958 0031 202	Brake knob		1	91	958 0047 911	Rating label	for DP-DJ150 E2	1
14	958 0031 309	45 rpm adaptor		1	91	958 0047 924	Rating label	for DP-DJ150 EK	1
16	958 0031 503	33/45 knob		1	91	958 0053 222	Rating label	for DP-DJ151 E3	1
17	958 0031 600	Spring washer (black)		4	91	958 0053 206	Rating label	for DP-DJ151 E2	1
20	958 0031 901	Spot light cover		1	91	958 0053 219	Rating label	for DP-DJ151 EK	1
21	958 0032 007	Spot light (DC12V 75mA)	LP02	1	92	958 0038 700	Serial no. label		1
22	958 0032 104	Spot light rubber base		1	93	958 0047 102	C-UL label	for E3	1
23	958 0032 201	Spot light button spring		1	94	958 0038 807	Band holder		1
24	958 0032 308	Cushion		1	95		PVC sheet		1
25	958 0032 405	Switch fixing plate		1	96		Canoe rivet		1
26	958 0032 502	Spot light spring (black)		2	97	958 0047 209	WASHER		1
28	958 0032 706	Mute cushion		1	98	958 0051 800	Rubber sheet(A)		6
29	958 0032 803	Leaf switch	SW03	1	99	958 0051 907	Rubber sheet		1
31	958 0033 006	Leaf button		1	100		Plate(A)		1
32	958 0033 103	Leaf spring		1	101	958 0053 303	Plate(B)		1
34	958 0033 307	Mute cushion (black)		2					
35	958 0033 404	Fixed axes		1					
36	958 0033 501	Washer		1					
38	958 0033 705	Power knob and shaft Ass'y	for DP-DJ150	1					
38	958 0051 402	Power knob and shaft Ass'y	for DP-DJ151	1					
39	958 0033 802	Spotlight holder		1					
40	958 0033 909	Transparent sheet		1					
42	958 0034 209	Start/stop knob	for DP-DJ150	1					
42	958 0051 606	Start/stop knob	for DP-DJ151	1					
43	958 0034 209	Knob base	for DP-DJ150	1					
43	958 0051 509	Knob base	for DP-DJ151	1					
44	958 0034 306	Steel ball		1					
45	958 0034 403	Spring		1					
46	958 0034 500	Tuning shaft (POWER)		1					
47	958 0034 607	3 E-ring washer		3					
50		Screw		2					
51	958 0035 004	Pitch ON/OFF knob		1					
52	958 0035 101	Ground pin		1					
53	958 0035 208	Washer		1					

## PACKING VIEW

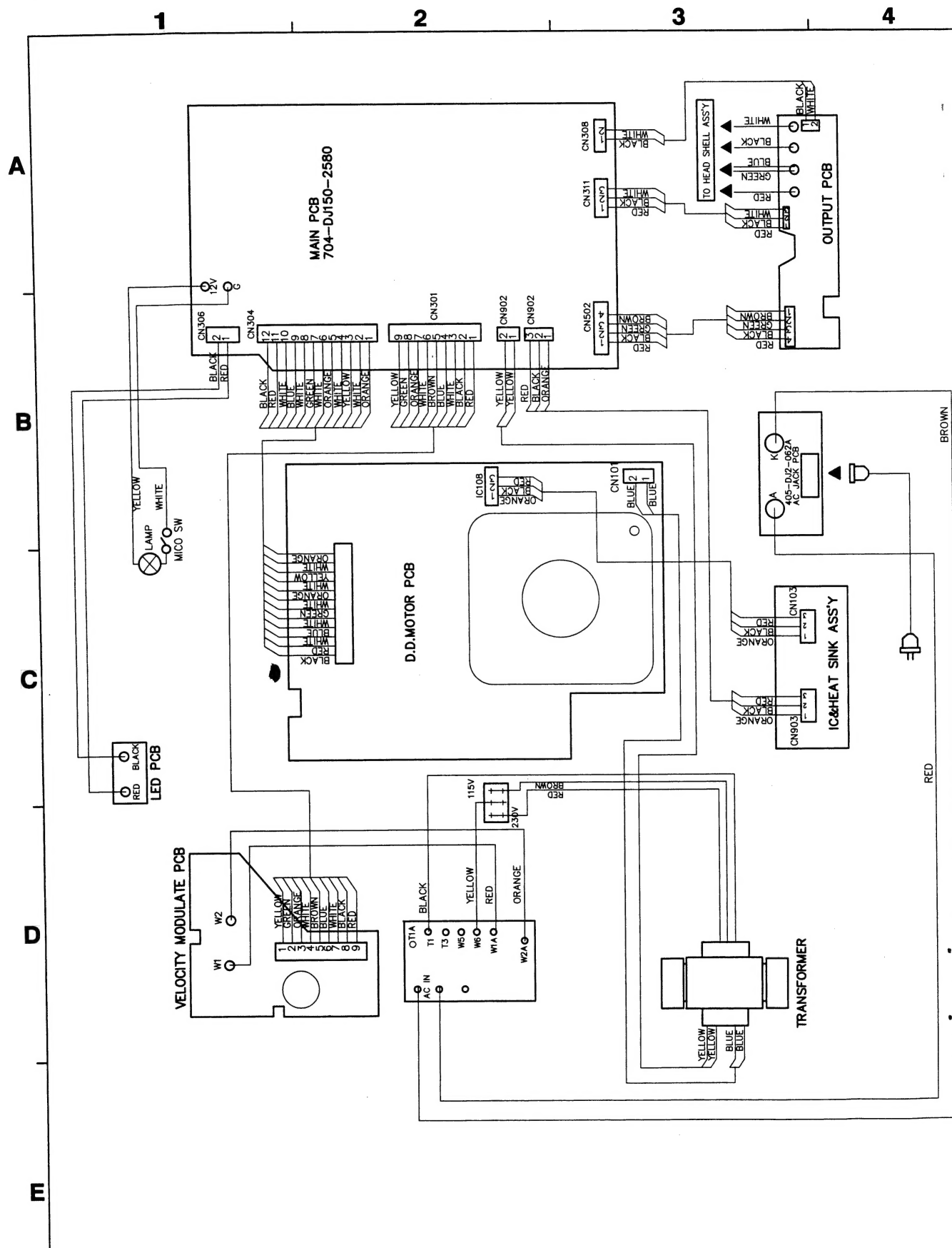


## PARTS LIST OF PACKING & ACCESSORIES

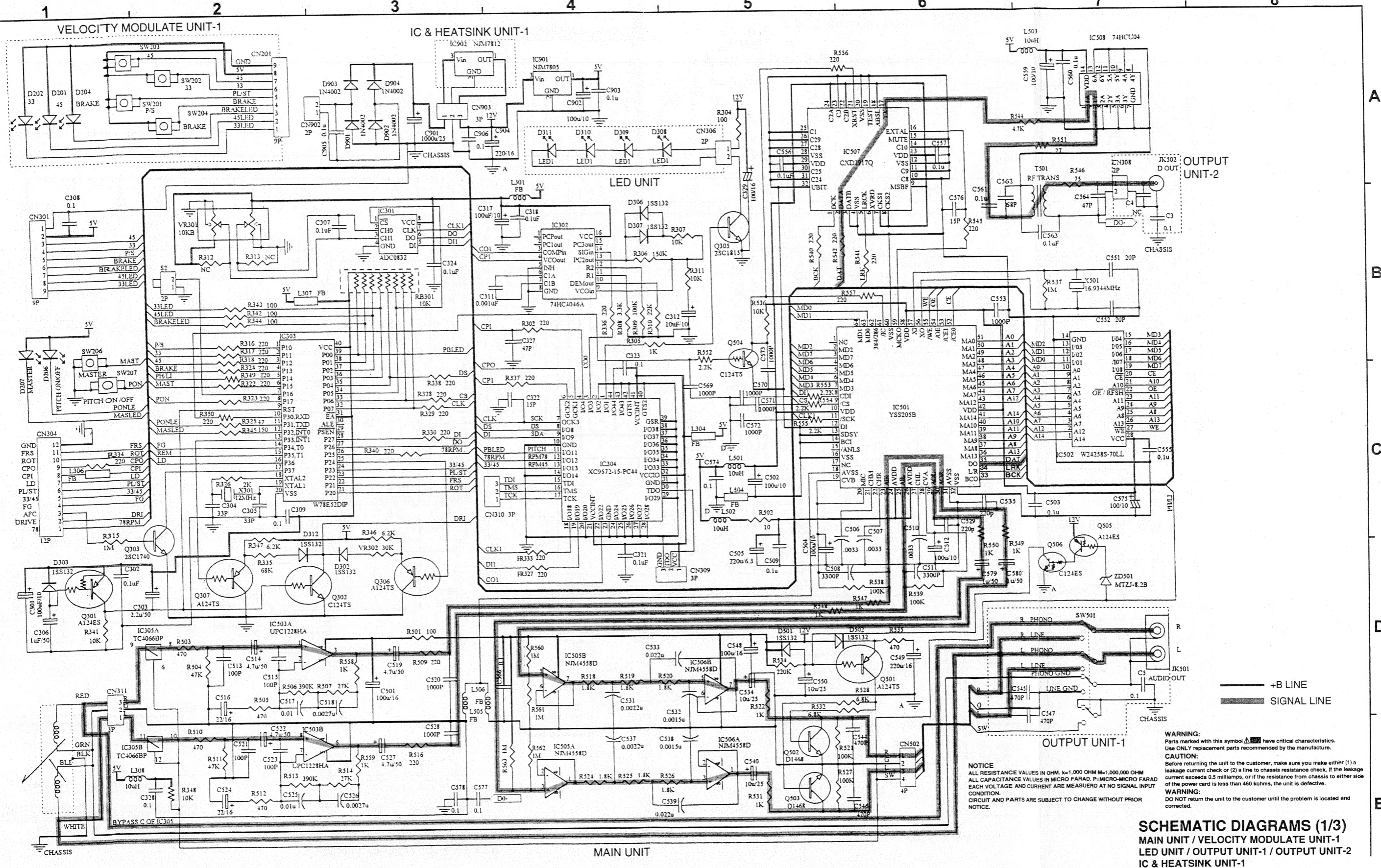
Note : The symbols in the column "Remarks" indicate the following destinations.  
E2 : Europe model, E3 : U.S.A. & Canada model, EK : U.K. model

Ref. No.	Part No.	Part Name	Remarks	Q'ty	Ref. No.	Part No.	Part Name	Remarks	Q'ty
1	515 0692 101	DEL warranty com.	for E3	1	⚠ 18	958 0038 124	AC cord	for E2	1
2	958 0048 509	Carton case	for DP-DJ150	1	⚠ 18	958 0038 137	AC cord	for EK	1
2	958 0052 809	Carton case	for DP-DJ151	1	20	958 0048 004	Instruction manual	for DP-DJ150 E3,E2,EK	1
3	958 0046 705	Slip sheet		2	20	958 0048 017	Instruction manual	for DP-DJ150 E2	1
4		Envelope Ass'y		1	20	958 0050 908	Instruction manual	for DP-DJ151 E3,E2,EK	1
5	958 0030 203	Dust cover Ass'y		1	20	958 0050 911	Instruction manual	for DP-DJ151 E2	1
6	958 0030 517	Slip mat		1	21	958 0047 801	2P pin plug cord		1
7	958 0046 608	Folder		1	22	958 0039 505	Poly bag	for Instruction manual	1
8	958 0039 204	PE bag	for Slip mat	1	23	958 0039 521	Poly bag	for Set	1
9	958 0039 301	Polyfoam (L)		1	23A	958 0039 534	Poly bag	for Dust cover	1
10	958 0039 408	Polyfoam (R)		1	24		UPC label	for DP-DJ150 E3	1
11	958 0039 518	Poly bag	for Turntable	1	24		E2 POS label	for DP-DJ150 E2	2
12	958 0030 407	Aluminium platter		1	24		EK POS label	for DP-DJ150 EK	2
13	958 0046 501	Folder	for Turntable	1	24		UPC label	for DP-DJ151 E3	1
14	958 0024 109	Appendage label		1	24		E2 POS label	for DP-DJ151 E2	2
15	958 0031 008	Headshell	for DP-DJ150	1	24		EK POS label	for DP-DJ151 EK	2
15	958 0053 109	Headshell	for DP-DJ151	1	26		Control card	for E3	1
16	958 0031 309	45 rpm adaptor		1	26		Control card	for E2	1
17	958 0030 805	Counter weight		1	26		Control card	for EK	1
⚠ 18	958 0038 111	AC cord	for E3	1					

## WIRING DIAGRAM

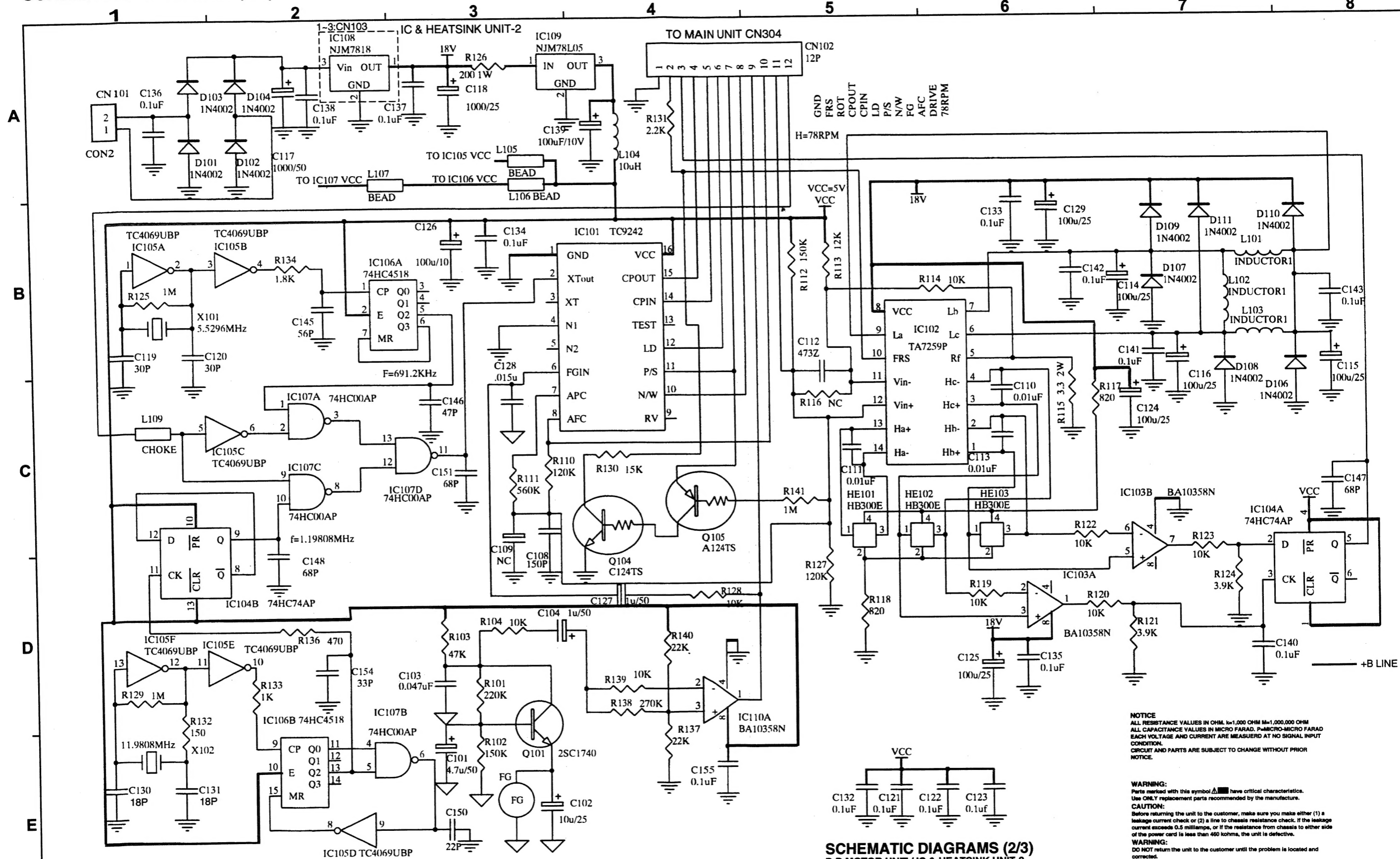


## SCHEMATIC DIA GRAMS (1/3)

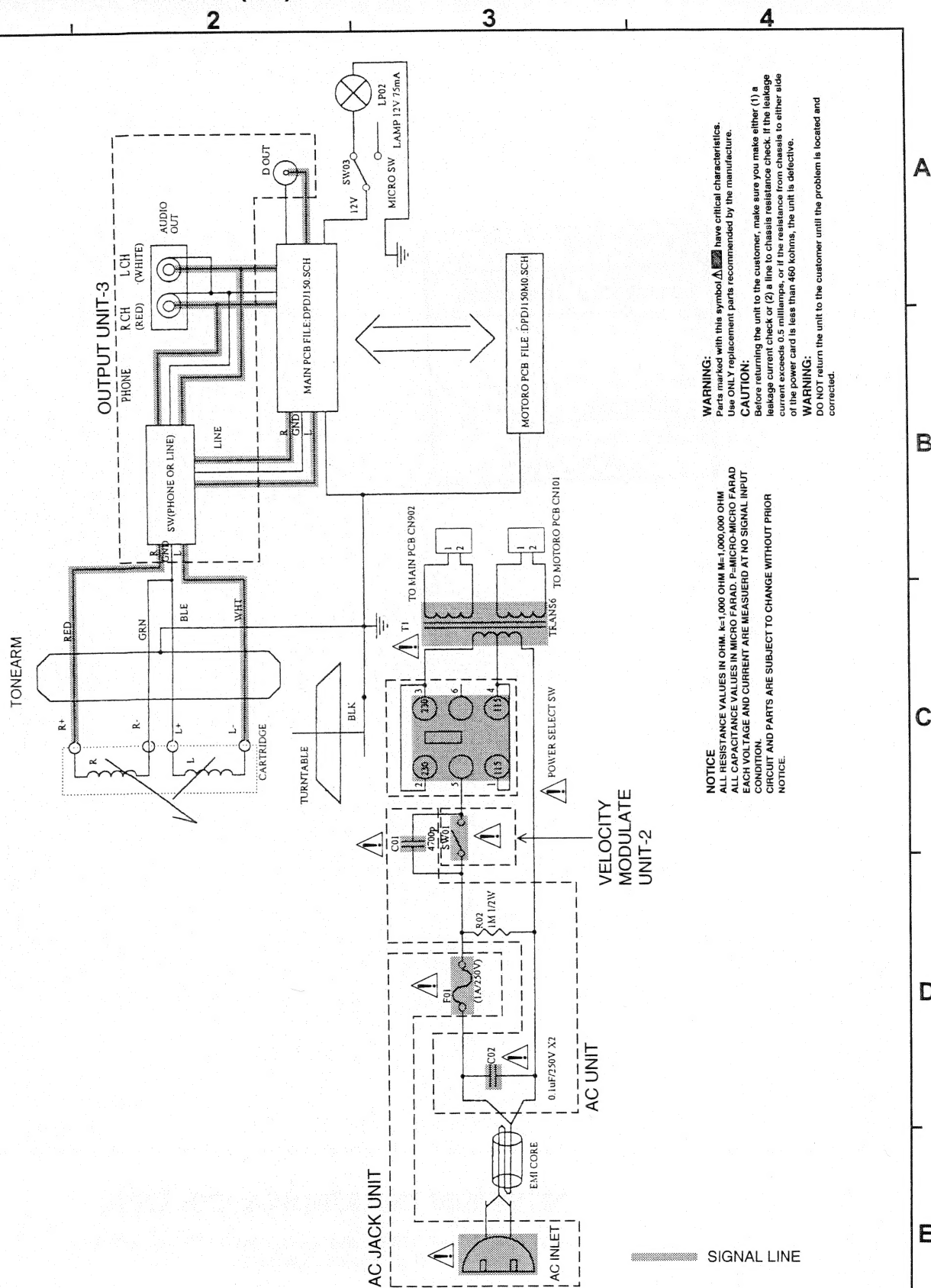


**SCHEMATIC DIAGRAMS (1/3)**  
**MAIN UNIT / VELOCITY MODULATE UNIT-1**  
**LED UNIT / OUTPUT UNIT-1 / OUTPUT UNIT-2**  
**IC & HEATSINK UNIT-1**

## SCHEMATIC DIAGRAMS (2/3)

SCHEMATIC DIAGRAMS (2/3)  
D.D.MOTOR UNIT / IC & HEATSINK UNIT-2

## SCHEMATIC DIAGRAMS (3/3)



### SCHEMATIC DIAGRAMS (3/3)

AC UNIT / VELOCITY MODULATE UNIT-2  
OUTPUT UNIT-3 / AC JACK UNIT